3. *On the organs of respiration.*—No appreciable effect was observed, except what might be referable to the slower propulsion of the blood by the heart.

4. *On the digestive organs.*—Inflammation of the mucous membrane, attended with its usual symptoms, though not generally of a severe character.

5. *On the urinary apparatus.*—Pain, frequent micturition, hæmaturia, dysuria, and retention have been noticed, but always in a slight degree.

6. *On the organs of generation.*—Uterine hemorrhage of the female, and debility of the organs in the male.

7. *On the skin and subcutaneous cellular tissue.*—Numbness and coldness of the surface, ecchymosis and petechiæ, more or less extensive.

8. *On the blood and other animal fluids.*—When blood drawn from the vessels was placed in contact with solution of quinine, it became liquefied, and the globules were destroyed; but, in order that such effects should take place in the living body, the presence of a much greater quantity than can be taken by the stomach would be required. Animals poisoned by this medicine did not present this liquid state of the blood, but an increase in the proportion of fibrin was found. No trace of quinine could be discovered in the milk or mucous secretions.

The absorption and elimination of quinine, in reference to its therapeutical employment, were ascertained by noting the period at which a precipitate appeared in the urine, on the addition of the bi-iodide of potassium, and by observation of the symptoms referable to the nervous system. Thus, it was observed that the sulphate, in doses exceeding three grains, is absorbed in from half an hour to two hours, and produces its physiological effects in another hour. These will continue for about half an hour. A dose of fifteen grains in six hours continues to manifest its influence for from five to six hours. Thirty grains, administered in two hours, produce symptoms lasting from twelve to fifteen hours. When the sulphate has been administered for several days, the effects continue many days after it has been withdrawn. The medicine is completely eliminated at the end of ten or twelve hours after small doses, and in about forty-eight or seventy-two hours after large doses.

Women and children are more susceptible of its influence than men; and the stature and strength of the individual modify its effects. Loss of blood increases also its influence, diminishing its stimulating, and increasing its depressing action. Opiates act in a similar manner, while alcoholic stimulants have a reverse operation.

In reference to its therapeutic properties, M. Brecquet found that the sulphate is the most active of all preparations of quinine; that the alkaloid itself has an action identical with the sulphate, as has also cinchonine, but that the latter is by one-third less powerful; that quinoidine has the same action as quinine on the nervous system, but is much more irritating to the alimentary canal.

M. Brecquet found the solution of sulphate more active by one-half than the same compound in the dry state. Administered by enemata, absorption was found to take place more rapidly than when it was given by the mouth, but the effects lasted a shorter time, and the alkaloid scarcely produced its physiological action. Employed for frictions, ointments, lotions, and other endermic methods, the absorption was very feeble, and no physiological action whatever could be traced.

The physiological and therapeutical effects of this medicine were more regularly and powerfully obtained by its administration in repeated doses; its exhibition, therefore, requires to be continued for a certain period.—*Lond. Med. Gaz.*, Oct. 1849, from *Comptes Rendus*, No. 22.

---

15. *Vegetable Parasites in Diseases of the Human Body.*—Minute vegetable parasites, it is well known, are often found on and within the tissues of living plants and animals, invertebrate and vertebrate. They are also found in many diseases of the human body; and, as the recent discoveries of Messrs. Brittain and Swayne of microscopic organisms in the evacuations of cholera patients have given some importance to the subject, we subjoin the following table, from the *London Journ. of Medicine* (Nov. 1849), which exhibits the names of the

observers and the diseases in which these cryptogamic vegetations have been observed:—

By whom observed.	*In what diseases.*	*References.*
Bennett, (John Hughes)	Favus: coating of the tongue; tubercular cavities, and sputa; on gums in typhus fever.	Transactions of Royal Soc. of Edin. vol. xv., part ii. 1842.
Berg	Aphthæ of children.	Müller's Archiv. 1842.
Boehm	Intestinal discharges of cholera patients.	Die Kranke Darmschleimhaut des Asiatischen Cholera. 1838.
Busk	Vomited matter (*sarcina* of Goodsir).	Microscopical Journal. 1843.
Cowdell	Perspiration of cholera.	Medical Gazette, Sept. 25, 1849.
Degner	Senile gangrene.	Annal. Physic. Medic. Wrateslav. Tentam. 28, p. 643.
Farre	False membrane expelled from intestine (allied to *Oscillatoria*).	Transactions of Microscop. Society, vol i. 1844–5.
Fuchs	Crusts of porrigo lupinosa.	Die Krankhaften Veränderungen der Haut. Gœttingen: 1840.
Goodsir, (John)	Matters ejected from the stomach (*sarcina ventriculi*).	Edin. Med. and Surg. Journ. April 1842.
Gruby	Favus, mentagra, porrigo decalvans (*microsporium Audouini* Gr.), porrigo scutulata; aphthæ (analogous to *sporotrichium*); and matters ejected in case of obstinate vomiting.	Comptes Rendus. 1841, '42, '43, and '44. Archives Générales. 1842.
Gunsburg	Plica Polonica.	Müller's Archiv. 1845.
Hannover	Diabetic urine (*Torula cerevisiæ*); mucous membrane in typhoid fever, pneumonia, pleurisy, phthisis, delirium tremens, apoplexy, diabetes, and chronic gastritis.	Müller's Archiv. 1842. Valentin's Repertorium für Anatomie und Physiologie. 1843.
Helmbrecht	Posterior chamber of eye.	Casper's Wochenschrift. 1842.
Heusinger	Blistered surfaces.	De generatione mucoris in organismo animali. Jenæ: 1821.
Jenner	Cholera evacuations.	London Journ. of Med. Feb. p. 148.
Langenbeck	Œsophagus, and ulcers of intestines, in a case of typhus. Various cutaneous eruptions; in a cerebral tumour, in a boy, aged two years.	Froriep's Neue Notizen. 1839. Samtlicher Bericht über die 18te. Versammlung der Gesellschaft deutsche Naturforscher und Aerzter zu Erlangen, in Sep. 1840.
Lebert	Favus (*Oidium Schœnleinii*); porrigo scutulata (*Achorion Leberti*); chronic ulcer of leg.	Physiol. patholog. Paris: 1845, tom. ii. Mém. sur la Teigne.
Mayer	Scrofulous affection of the ear. (*Mucedo?*)	Müller's Archiv. 1844.
Œsterlen	Aphthæ.	Medicinishe Vierteljahrschrift. 1842.
Rayer	Tuberculous patient.	Journal de l'Institut. 1842.
Remak	Tinea favosa (*Achorion Schœnleinii*); porrigo lupinosa; caries of the teeth, and aphthæ; in all fluid dejections, however produced; expectorations in pneumonia.	Medicin. Zeitung. Berlin: 1840. Diagnost. und Pathol. Untersuch. Berlin: 1845.
Robin	Aphthæ; dark brown liquid from stomach of icteric patient, who presented lesions of yellow fever.	Des Végétaux qui croissent sur l'homme et sur les animaux vivants. Paris: 1847.
Schœnlein	Favus; porrigo lupinosa.	Müller's Archiv. 1839.
Simon	Pityriasis versicolor.	De veget. par. Berlin: 1847.
Sluyter	Ditto.	Hautkrankheiten. 1848.
Textor	Porrigo favosa; impetigo scrofulosa, etc.	Archives Générales. 1842.
Vogel	Aphthæ, and vomited matters.	Allgemeine Zeitung. 1842.
Walther	Viscous matter in plica Polonica.	Müller's Archiv. 1844.
Wilkinson	Uterine discharge.	Lancet, Oct. 27, 1849.